

BRUHATH BANGALORE MAHANAGARA PALIKE

Name of work : Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli Sub Division.

First and Final Bill

Measurement Recorded in :

L. No	Description of work	Chainages	No	L	B1	B2	D	Qty
1	KSRRB M300-59.2. Loosening, levelling and compacting original ground supporting embankment to facilitate placement of first layer of embankment I subgrade, scarified to a depth of 150mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment/subgrade including HOM construction, labour etc.. complete as per specifications. MORTH Specification No. 305.3.4 (PW.P& I WTD SR 2018-19, Pg No 147 Item No.19.66)							
	5th Cross			L.	B ₁	B ₂		
		0	15	1	15.00	4.15	3.90	60.38
		15	30	1	15.00	3.90	3.80	57.75
		30	45	1	15.00	3.80	3.72	56.40
		45	60	1	15.00	3.72	3.20	51.90
		60	75	1	15.00	3.20	4.00	54.00
		75	90	1	15.00	4.00	3.10	53.25
		90	105	1	15.00	3.10	4.15	54.38
		105	120	1	15.00	4.15	3.90	60.38
		120	135	1	15.00	3.90	4.00	59.25
		135	150	1	15.00	4.00	3.90	59.25
		150	165	1	15.00	3.90	4.10	60.00
		165	180	1	15.00	4.10	4.00	60.75
		180	195	1	15.00	4.00	3.90	59.25
		195	210	1	15.00	3.90	3.90	58.50
		210	225	1	15.00	3.90	3.90	58.50
		225	240	1	15.00	3.90	4.10	60.00
	5th to 4th A Intermediate road							
		0	15	1	15.00	4.00	4.50	63.75
		15	30	1	15.00	4.50	3.80	62.25
		30	31	1	1.00	4.50	3.80	4.15
	4th A Cross							
		0	15	1	15	4.55	4.56	68.33
		15	30	1	15	4.56	4.40	67.20
		30	45	1	15	4.40	4.55	67.13
		45	60	1	15	4.55	4.44	67.43
		60	75	1	15	4.44	4.30	65.55
		75	90	1	15	4.30	4.60	66.75
		90	92	1	2	4.60	4.50	9.10
	4th A Cross							
		0	15	1	15	4.2	5.2	70.50
		15	30	1	15	5.2	5.1	77.25
							Total	1613.30
								Sqm

Assistant Engineer
Ward No.12
BBMP, Bengaluru

Assistant Executive Engineer
Shettyhalli Sub Division
BBMP, Bengaluru

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 056

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BRUHATH BANGALORE MAHANAGARA PALIKE

Name of work : Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli Sub Division.

First and Final Bill

Measurement Recorded in :

First and Final Measurement Recorded in :									
Sl. No	Description of work	Chainages	No	L	B1	B2	D	Qty	
2	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tipplers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (PW,P & I)WTD SR 2018-19, Item No.19.14, Page No.143)								
	5th Cross			L	B ₁	B ₂	D		
		0	15	1	15.00	4.15	3.90	0.50	30.19
		15	30	1	15.00	3.90	3.80	0.50	28.88
		30	45	1	15.00	3.80	3.72	0.50	28.20
		45	60	1	15.00	3.72	3.20	0.50	25.95
		60	75	1	15.00	3.20	4.00	0.50	27.00
		75	90	1	15.00	4.00	3.10	0.50	26.63
		90	105	1	15.00	3.10	4.15	0.50	27.19
		105	120	1	15.00	4.15	3.90	0.50	30.19
		120	135	1	15.00	3.90	4.00	0.50	29.63
		135	150	1	15.00	4.00	3.90	0.50	29.63
		150	165	1	15.00	3.90	4.10	0.50	30.00
		165	180	1	15.00	4.10	4.00	0.50	30.38
		180	195	1	15.00	4.00	3.90	0.50	29.63
		195	210	1	15.00	3.90	3.90	0.50	29.25
		210	225	1	15.00	3.90	3.90	0.50	29.25
		225	235	1	10.00	3.90	4.10	0.50	20.00
	4th cross road								
		0	15	1	15.00	4.00	4.50	0.50	31.88
		15	30	1	15.00	4.50	3.80	0.50	31.13
		30	31	1	15.00	4.50	3.80	0.50	31.13
	4th A Cross								
		0	15	1	15	4.50	5.40	0.5	37.13
		15	30	1	15	4.56	4.40	0.5	33.60
		30	45	1	15	4.40	4.55	0.5	33.56
		45	60	1	15	4.55	4.44	0.5	33.71
		60	75	1	15	4.44	4.30	0.5	32.78
		75	90	1	15	4.30	4.60	0.5	33.38
		90	92	1	2	4.60	4.50	0.5	4.55
	4th A Cross								
		0	15	1	15	4.2	5.2	0.5	35.25
		15	30	1	15	5.2	5.1	0.5	38.63
							Total		828.66
									Cum

Assistant Engineer
Ward No.12
BBMP, Bengaluru

Assistant Executive Engineer
Shettyhalli Sub Division
BBMP, Bengaluru

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KRIDL, BBMP DIVISION
BENGALURU-560 056

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BRUHATH BANGALORE MAHANAGARA PALIKE

Name of work : Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli Sub Division.

First and Final Bill

Measurement Recorded in :

Sl. No.	Description of work	Chainages	No	L	B1	B2	D	Qty
3	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occurring during rolling including cost of all labour, HOM complete as per specifications. MORTH I Chapter 3 (PW,P& I WTD SR 2018-19, Pg No 147 Item No.19.64)							
	5th Cross			L	B ₁	B ₂		
		0	15	1	15.00	4.15	3.90	60.38
		15	30	1	15.00	3.90	3.80	57.75
		30	45	1	15.00	3.80	3.72	56.40
		45	60	1	15.00	3.72	3.20	51.90
		60	75	1	15.00	3.20	4.00	54.00
		75	90	1	15.00	4.00	3.10	53.25
		90	105	1	15.00	3.10	4.15	54.38
		105	120	1	15.00	4.15	3.90	60.38
		120	135	1	15.00	3.90	4.00	59.25
		135	150	1	15.00	4.00	3.90	59.25
		150	165	1	15.00	3.90	4.10	60.00
		165	180	1	15.00	4.10	4.00	60.75
		180	195	1	15.00	4.00	3.90	59.25
		195	210	1	15.00	3.90	3.90	58.50
		210	225	1	15.00	3.90	3.90	58.50
		225	235	1	10.00	3.90	4.10	40.00
	4th cross road							
		0	15	1	15.00	4.00	4.50	63.75
		15	30	1	15.00	4.50	3.80	62.25
		30	31	1	1.00	4.50	3.80	4.15
	4th A Cross							
		0	15	1	15	4.50	5.40	74.25
		15	30	1	15	4.56	4.40	67.20
		30	45	1	15	4.40	4.55	67.13
		45	60	1	15	4.55	4.44	67.43
		60	75	1	15	4.44	4.30	65.55
		75	90	1	15	4.30	4.60	66.75
		90	92	1	2	4.60	4.50	9.10
	4th A Cross							0.00
		0	15	1	15	4.2	5.2	70.50
		15	30	1	15	5.2	5.1	77.25
						Total		1599.23
								Sqm

Assistant Engineer
Ward No.12
BBMP, Bengaluru

Assistant Executive Engineer
Shettyhalli Sub Division
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EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 056

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BRUHATH BANGALORE MAHANAGARA PALIKE

Name of work :Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli Sub Division.

First and Final Bill

Measurement Recorded in :

Measurement Recorded in :									
Sl. No	Description of work	Chainages		No	L		B1	D	Qty
4	KSRRB M300-53. Construction of embankment with approved material Gravel/Murum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel I murum, watering charges & compaction by vibratory roller to 95% of modified proctors density. MORTH Specification No. 305 (PW,P& IWTD SR 2018-19, Pg No 147 Item No.19.60)								
	5th Cross	CHAINAGE			L	B ₁	B ₂	D	
		0	15	1	15.00	4.15	3.90	0.30	18.11
		15	30	1	15.00	3.90	3.80	0.30	17.33
		30	45	1	15.00	3.80	3.72	0.30	16.92
		45	60	1	15.00	3.72	3.20	0.30	15.57
		60	75	1	15.00	3.20	4.00	0.30	16.20
		75	90	1	15.00	4.00	3.10	0.30	15.98
		90	105	1	15.00	3.10	4.15	0.30	16.31
		105	120	1	15.00	4.15	3.90	0.30	18.11
		120	135	1	15.00	3.90	4.00	0.30	17.78
		135	150	1	15.00	4.00	3.90	0.30	17.78
		150	165	1	15.00	3.90	4.10	0.30	18.00
		165	180	1	15.00	4.10	4.00	0.30	18.23
		180	195	1	15.00	4.00	3.90	0.30	17.78
		195	210	1	15.00	3.90	3.90	0.30	17.55
		210	225	1	15.00	3.90	3.90	0.30	17.55
		225	235	1	10.00	3.90	4.10	0.30	12.00
	4th cross road								
		0	15	1	15.00	4.00	4.50	0.30	19.13
		15	30	1	15.00	4.50	3.80	0.30	18.68
		30	31	1	1.00	4.50	3.80	0.30	1.25
	4th A Cross								
		0	15	1	15	4.50	5.40	0.25	18.56
		15	30	1	15	4.56	4.40	0.25	16.80
		30	45	1	15	4.40	4.55	0.25	16.78
		45	60	1	15	4.55	4.44	0.25	16.86
		60	75	1	15	4.44	4.30	0.25	16.39
		75	90	1	15	4.30	4.60	0.25	16.69
		90	92	1	2	4.60	4.50	0.25	2.28
	4th A Cross								0.00
		0	15	1	15	4.2	5.2	0.25	17.63
		15	30	1	15	5.2	5.1	0.25	19.31
							Total		451.51
									Cum

Assistant Engineer
Ward No.12
BBMP, Bengaluru

26/02/2021

Assistant Executive Engineer
Shettyhalli Sub Division
BBMP, Bengaluru

26/2

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 056

Name of work : Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli Sub Division.

Measurement Recorded in :

Assistant Engineer
Ward No.12
BBMP, Bengaluru

Assistant Executive Engineer
Shettyhalli Sub Divison
BBMP, Bengaluru

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 056

BRUHATH BANGALORE MAHANAGARA PALIKE

Name of work : Improvements to Concrete Roads in Gatepalya Shettyhalli in ward no.12, Shettyhalli Sub Division.

First and Final Bill

Measurement Recorded in :

Description of work	No	L	B	D	Qty
Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification.					
3rd Cross Road from Kammagondahalli Main Road	1				2.16
4th Cross	1				2.33
4th A Cross	1				2.33
4th to 4th A Cross Intermediate Road	1				0.36
5th to 4th A Cross Intermediate Road	1				0.50
5th Cross Road from Kammagondahalli Main Road	1				4.57
10th Cross Road from Kammagondahalli Main Road	1				3.15
5th cross road (culvert)	1				0.21
4th cross road (culvert)	1				0.21
4th A cross road (culvert)	1				0.21
				Total	16.03
				Limited to Tendered Qty	15.47
					MT

Assistant Engineer
Ward No. 12
BBMP, Bengaluru

Assistant Executive Engineer
Shettyhalli Sub Division
BBMP, Bengaluru

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 056

BRUHAT BANGALORE MAHANAGARA PALIKE

SHETTYHALLI SUB DIVISION, DASARAHALLI

Name Of Work: Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli

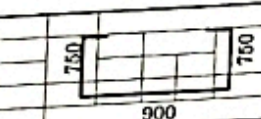
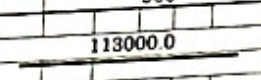
MEASUREMENT SHEET

Item No: 5

Item Name:

Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and I or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specification No. KBS 4.6.3

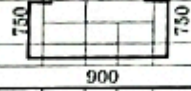
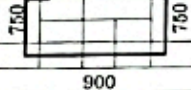
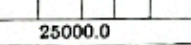
Steel Calculation

Steel Calculation												
SL NO	CHAINAGE		SIDE	BAR	No	BAR DIA (mm)	SPACING (mm)	Length (mm)	No. OF BARS ON EACH FACE	LENGTH OF EACH BAR (mm)	SHAPE OF BARS (ALL DIMENSIONS ARE IN mm) (NOT TO SCALE)	TOTAL WT (kg)
	FROM	TO										
Name of the Road: 3rd Cross Road from Kammagondahalli Main Road												
1	0.0	113.0	RHS L=113	Main (Outer)	1	10	150	113000.0	754	2400.0		1115.476
				Dist. (Outer)	1	10	150	2400.0	15	113000.0		1044.834
Total in Kgs											2160.31	
Total in Tonne											2.16	

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EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 056

BRUHAT BANGALORE MAHANAGARA PALIKE												
SHETTYHALLI SUB DIVISION, DASARAHALLI												
Name Of Work: Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli												
Item No:		MEASUREMENT SHEET										
Item Name:		Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and I or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specification No. KHS 4.6.3										
SL NO	CHAINAGE		Steel Calculation									
	FROM	TO	SIDE	BAR	No	BAR DIA (mm)	SPACING (mm)	Length (mm)	No. OF BARS ON EACH FACE	LENGTH OF EACH BAR (mm)	SHAPE OF BARS (ALL DIMENSIONS ARE IN mm) (NOT TO SCALE)	TOTAL WT (kg)
Name of the Road: 4th Cross												
1	0.0	97.0	RHS L=97	Main (Outer)	1	10	150	97000.0	645	2400.0		954.220
				Dist. (Outer)	1	10	150	2400.0	15	97000.0		896.893
1	0.0	25.0	RHS L=25	Main (Outer)	1	10	150	25000.0	166	2400.0		245.582
				Dist. (Outer)	1	10	150	2400.0	15	25000.0		231.158
Total in Kgs											2327.853	
Total in Tonne											2.33	

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EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 056

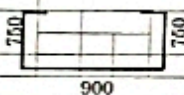
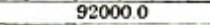
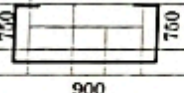
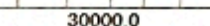
BRUHAT BANGALORE MAHANAGARA PALIKE

SHETTYHALLI SUB DIVISION, DASARAHALLI

Name Of Work: Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli

Item No: 5 MEASUREMENT SHEET

Item Name: KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work TMT bars Fe500 including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specification No. KBS 4.6.3 (KPWD SR 2018-19, Page No.18, Item No.4.46.2)

SL. NO	CHAINAGE		Steel Calculation										TOTAL WT (kg)
			SIDE	BAR	No	BAR DIA (mm)	SPACING (mm)	Length (mm)	No. OF BARS ON EACH FACE	LENGTH OF EACH BAR (mm)	SHAPE OF BARS (ALL DIMENSIONS ARE IN mm) (NOT TO SCALE)		
	FROM	TO											
Name of the Road: 4th A Cross													
1	0.0	92.0	RHS L=92	Main (Outer)	1	10	150	92000.0	614	2400.0		908.358	
				Dist. (Outer)	1	10	150	2400.0	15	92000.0		850.661	
1	0.0	30.0	RHS L=30	Main (Outer)	1	10	150	30000.0	200	2400.0		295.882	
				Dist. (Outer)	1	10	150	2400.0	15	30000.0		277.390	
Total in Kgs												2332.291	
Total in Tonne												2.33	

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EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 056

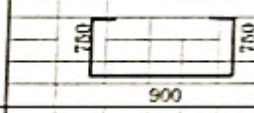
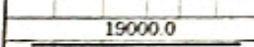
BRUHAT BANGALORE MAHANAGARA PALIKE

SHETTYHALLI SUB DIVISION, DASARAHALLI

Name Of Work: Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli

Item No: 5 MEASUREMENT SHEET

Item Name: Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and I or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specification No. KBS 4.6.3

Specification No. RES 4.6.3												
SL NO	CHAINAGE		Steel Calculation									
			SIDE	BAR	No	BAR DIA (mm)	SPACING (mm)	Length (mm)	No. OF BARS ON EACH FACE	LENGTH OF EACH BAR (mm)	SHAPE OF BARS (ALL DIMENSIONS ARE IN mm) (NOT TO SCALE)	TOTAL WT (kg)
	FROM	TO										
Name of the Road: 4th to 4th A Cross Intermediate Road												
1	0.0	19.0	RHS L=19	Main (Outer)	1	10	150	19000.0	127	2400.0		187.885
				Dist. (Outer)	1	10	150	2400.0	15	19000.0		175.680
											Total in Kgs	363.57
											Total in Tonne	0.36

22/01

22/01

ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ರಸ್ತೆ ಮತ್ತು ಕಟ್ಟಡ ವಿಭಾಗ, ಕಾರಂಹಳ್ಳಿ ಪುರಂ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.

EXECUTIVE ENGINEER-4
KRIDL, BBMP DIVISION
BENGALURU-560 058

BRUHAT BANGALORE MAHANAGARA PALIKE

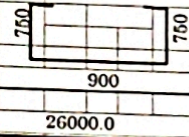
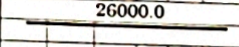
Name Of Work: Improvements to Concrete Roads in KG Halli AK Colony and Surrounding area in Shettyhalli Ward No.12 Shettyhalli

Item No: 5

MEASUREMENT SHEET

Item Name:

Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and I or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specification No. KBS 4.6.3

SL-NO	CHAINAGE		Steel Calculation										
			SIDE	BAR	No	BAR DIA (mm)	SPACING (mm)	Length (mm)	No. OF BARS ON EACH FACE	LENGTH OF EACH BAR (mm)	SHAPE OF BARS (ALL DIMENSIONS ARE IN mm) (NOT TO SCALE)	TOTAL WT (kg)	
	FROM	TO											
Name of the Road: 5th to 4th A Cross Intermediate Road													
1	0.0	26.0	RHS L=26	Main (Outer)	1	10	150	26000.0	174	2400.0		257.418	
				Dist. (Outer)	1	10	150	2400.0	15	26000.0		240.404	
												Total in Kgs	497.82
												Total in Tonne	0.50

[Signature]
22/01

[Signature]
22/01

ಇದರಲ್ಲಿ 26.00 ಮೀಟರ್ ರಸ್ತೆಗೆ 10mm ಟಿ.ಎಂ.ಟಿ. ಸ್ಟೀಲ್ ರಿಫೋರ್ಸಿಂಗ್ ಒದಗಿಸುವುದು.
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.

[Signature]
EXECUTIVE ENGINEER-4
KRIDL, DBMP DIVISION
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